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**Title**: Male sperm whales off Northern Chile: They may be pickier than we think.

Category: Behavior

**Student**: M.A./M.S.

**Preferred Format**: Either Oral or Poster Presentation

**Abstract**: Between March and December 2000 we used a 12m ocean going sailing vessel to study sperm whales (Physeter macrocephalus) in the waters of the Humboldt Current off northern Chile. We conducted 10 trips, ranging in duration from 12 to 21 days. Groups of females and immatures were tracked both visually and acoustically using a directional hydrophone. Photographic identifications of individual whales in these groups were collected, as well as photographs of mature males when they were present. Many questions remain unanswered about how males on breeding grounds interact with each other and with females. The sighting rate of mature males off Chile, 0.40 mature males per day spent tracking females, was much higher than that in previous research in the Galapagos Islands, 0.26. A total of 33 males were identified off Chile, 24 of which were only sighted on one day, while the maximum number of days one male was photographed was seven (over a period of 14 days). Numbers of mature males peaked in July where their residency off northern Chile ranged from a few days to two weeks. The sighting rate between the first and last identification of a particular male, for males that were identified on more than two days was 0.39 per day. Female sperm whales belong to acoustic clans that span large geographic ranges and are sympatric with each other. During this study, four clans were identified. Different males were identified with each clan and no male was ever seen with more than one clan. This suggests that clan identity is of importance to male sperm whales and they may be choosing only to mate with individuals in one particular clan.